AKANSHA SHARMA
Software Engineer
Charlottesville, Virginia | +1(231) 527-8780 | akansha.sharma22@gmail.com
LinkedIn: https://www.linkedin.com/in/akansha-sharma-56806375/

PROFESSIONAL SUMMARY

- A highly motivated Software Engineer with a strong academic background, having completed a Master of Science in Information Systems with a specialization in Information Security & Intelligence from Ferris State University (MISI, GPA: 3.64, Dec. 2023)
- Acquired a strong foundation in data management, security principles, operating systems, database systems, data structures, network security, big data, and data mining technologies through relevant coursework
- Solid foundation in data analysis, business intelligence, information security principles, database systems, network security, and data mining technologies
- Hands-on experience in areas including data mining, big data, web/mobile technologies, cloud computing, parallel programming, and object-oriented design through academic projects and coursework
- Expertise in developing end-to-end data analytics solutions, leveraging web scraping, data cleaning, transformation, and interactive dashboard creation
- Proficient in multiple programming languages: Python, JavaScript, SQL
- Experienced in implementing Object-Oriented Programming concepts
- Well-versed in microservice architectures, REST API interfaces, Algorithms, and Data Structures
- Proficient in Microsoft Office tools (Word, Excel, PowerPoint, Outlook, Visio)
- Experienced in manual and automation testing in C#, Python, VBA, XML using Selenium, and QTP (Quick Test Pro)/UFT in both Agile and Waterfall Development Cycles
- Performed comprehensive testing, including Functional, Integration, Regression, System, GUI, Smoke/Sanity, Usability, Front-end, Browser Compatibility, API, and User Acceptance Testing
- Adept in writing and maintaining test cases, logging bugs, and ensuring quality product delivery
- Planned, designed, built, and maintained various automation frameworks, such as Data-Driven, Keyword-Driven, Hybrid, and Behavior-Driven Development (BDD) Testing Frameworks
- Familiarity with Test-Driven Development (TDD) and BDD methodologies, including JUnit and TestNG
- Proficient in problem-solving and Defect Tracking using bug tracking tools like HP ALM, Microsoft TFS, JIRA, and Azure Boards
- Experienced in utilizing GitHub, Distributed Version Control System, for source repositories and Continuous Integration (CI)
- Familiar with cloud computing platforms such as Azure, AWS and OCI for creating and configuring test environments, connecting databases, and running scripts
- Proven expertise in working with Linux operating systems and developing and consuming web services
- Actively participated in Scrum/Agile methodologies throughout the software development life cycle
- Strong team player with problem-solving abilities, excellent communication skills, multitasking, time-management skills, flexibility, and a passion for continuous learning with a proactive attitude
- Committed to delivering high-quality solutions within tight deadlines while collaborating effectively with cross-functional teams

EDUCATION

FERRIS STATE UNIVERSITY   Michigan
***Masters in Information Systems (MISI),* GPA: 3.64**   *Jan.* 2022 – Dec. 2023
*Specializations: **Information Security** & **Business Intelligence***
Relevant Coursework:
Data Management & Security, Business Intelligence, Project Management, Geographic Information Systems (GIS), Information Systems Strategy, Information Security/ Assurance, Governance Risk and Compliance.

- Acquired a comprehensive understanding of **data handling, analysis, security principles, operating systems, database systems, data structures, network security, big data, data mining technologies, agile/scrum methodologies, cloud computing concepts, object-oriented design principles, parallel programming techniques, distributed systems, web/mobile technologies, algorithms, and artificial intelligence** through rigorous coursework in Data Management & Security, Business Intelligence, Information Security/Assurance, and Project Management.

Project 1: "Building a T20 Dream Team with Data Analytics"
- Developed an end-to-end data analytics solution, incorporating Extract-Transform-Load (ETL) processes and data visualization components.
- Leveraged JavaScript for web scraping, Python for data cleaning, transformation, and applying data structures and algorithms.
- Utilized Power BI for creating interactive dashboards, visualizations, and team optimizations.
- Implemented object-oriented programming (OOP) principles and design patterns for maintainable and scalable code.
- Employed web technologies like HTML5, CSS3, and JavaScript for building user interfaces and data interaction components.
- Designed visually appealing and intuitive data visualizations for effective communication of insights.
- Incorporated optimization algorithms and heuristics for team selection and strategy formulation.
- Enabled data-driven decision-making for competitive cricket squad selection and analysis.
- Leveraged version control systems (Git) and collaborative development practices.

Project 2: "Self Portfolio"
- Developed a personal portfolio website using HTML5, CSS3, and JavaScript, showcasing proficiency in front-end web development.
- Implemented responsive web design principles to ensure optimal viewing and interaction across various devices and screen sizes.
- Incorporated JavaScript for building interactive and dynamic user interfaces.
- Followed accessibility guidelines (WCAG) and best practices for inclusive and user-friendly design.
- Implemented smooth user experience with animations, transitions, and navigation techniques.
- Integrated third-party APIs and services for enhanced functionality (e.g., contact forms, maps, social media integration).
- Ensured cross-browser compatibility and conducted thorough testing across multiple browsers and devices.
- Utilized version control systems (Git) and collaborative development practices for efficient code management and teamwork.
- Deployed the website to a hosting platform (GitHub Pages) for public access.

Project 3: "Student Information Management System (SIMS)"
- Developed a comprehensive web-based application for managing student records, course enrollments, and academic performance using PHP, MySQL, HTML, CSS, and JavaScript.
- Designed and implemented a normalized relational database schema adhering to database design principles and data modeling techniques.
- Utilized MySQL for efficient data storage, retrieval, and complex querying, leveraging SQL for data manipulation and integrity constraints.
- Incorporated robust user authentication and authorization mechanisms to ensure data security and privacy.
- Implemented core features such as student registration, course enrollment, grade management, attendance tracking, and report generation. Employed stored procedures, triggers, and views to encapsulate business logic and maintain data integrity within the database.
- Optimized database performance through indexing strategies, query optimization techniques, and caching mechanisms.
- Conducted database performance tuning and monitoring to identify and address bottlenecks and inefficiencies.
- Implemented data backup and recovery strategies to ensure data availability and reliability.
- Followed best practices for database security, including input validation, parameterized queries, and encryption of sensitive data.
- Integrated front-end technologies (HTML, CSS, JavaScript) with the back-end PHP and MySQL components for a seamless user experience.
- Employed responsive web design principles and frameworks for optimal viewing across various devices and screen sizes. Implemented error handling, logging, and debugging mechanisms for efficient troubleshooting and maintenance.
- Utilized version control systems (Git) and collaborative development practices for efficient code management and teamwork.

EXPERIENCE

AVEVA Solutions India LLP   Hyd, India
Leading engineering, design and information management software MNC
R&D Member of Technical Staff - Product Test (Software Tester)   2016 – 2021
- Spearheaded the creation and maintenance of test cases, test methodologies, and documentation for traceability and repeatability across WINDOWS/WEB applications, utilizing C#, VBA, and ASP.NET framework.
- Identified and prioritized regression test cases for automation, planned and coordinated automation activities within the team, and executed automated test cases using Application Lifecycle Management (ALM) tool.
- Conducted comprehensive testing, including functional, regression, exploratory, performance, load, and smoke tests for applications and databases, leveraging Unified Functional Test (UFT), HP QuickTest Pro (QTP) tools.
- Effectively reported issues in work management tools (TFS & Azure Boards), providing detailed steps to recreate and resolve the identified defects.
- Actively participated in SCRUM/AGILE ceremonies, such as daily stand-ups, sprint planning meetings, sprint reviews, and retrospectives, fostering collaboration and continuous improvement.
- Contributed to all phases of risk management assessments and Software Development Life Cycle (SDLC), with a focus on analyzing user requirements, test design, and test tools selection.
- Supported the metrics program by creating, collecting, and tracking test-related metrics, enabling data-driven decision-making and process optimization utilizing Excels.
- Leveraged Git and GitHub for distributed version control and collaboration on software projects, ensuring efficient code management and team coordination.

PROJECTS

- <u>Project 1</u>: "Leave Application with Oracle Integration, Visual Builder, Processes" Developed a leave application system using Oracle Integration Cloud (OIC), Visual Builder Cloud Service (VBCS), and Process Cloud Service (PCS). Implemented integration workflows, designed user interfaces, and automated business processes, demonstrating proficiency in Oracle Cloud Computing technologies and application development.

- <u>Project 2</u>: "Database Application Using Windows GUI" Developed a feature-rich Windows Music application using C# and ASP.NET framework in Visual Studio, seamlessly integrating MySQL for database design and SQL Queries creation, MySQL Workbench for robust database management. Leveraged Git and GitHub for distributed version control, ensuring collaborative development. Implemented an intuitive GUI with albums and tracks display, executed complex database operations, and designed the application structure using UML and ER diagrams. Proficiently utilized a technology stack encompassing ASP.NET, MySQL Workbench, Visual Studio, Git, and GitHub, demonstrating a comprehensive skill set in full-stack development and collaborative software engineering.

TECHNICAL SKILLS

Languages: Python, JavaScript, SQL, C#

Operating Systems: Windows, Linux

Web Technologies: HTML5, CSS3, ReactJS, Angular, REST API

Windows Technologies: VBA, XML

Cloud Technologies: AWS, Oracle Cloud Infrastructure (OCI)

Databases: SQL Server, MySQL, PostgreSQL, MongoDB

Version Control Systems: Git, Github

Integrated Development Environment: Visual Studio, Pycharm, VS Code, Jupyter Notebooks, Visual Builder Studio

Development Methodologies: Agile, Scrum, Continuous Integration/Continuous Deployment (CI/CD)

Project Management Tools: JIRA, Microsoft TFS, Azure Boards

Visualization Tools: Tableau, Power BI, Excels